

Appl. No. 09/824,239
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently amended) A method of annunciating problems in a system, comprising correlating performance degradation information and service violation information associated with system problems, to produce problem priority information for said system problems; and
~~producing signals for concurrently indicating~~ annunciating said system problems and said problem priority information associated with said system problems.
2. (Previously presented) The method of claim 1 wherein producing problem priority information comprises quantifying a relative importance of said system problems.
3. (Currently amended) The method of claim 2 further comprising ~~producing signals which represent~~ determining a cost associated with at least one problem.
4. (Currently amended) The method of claim 3 wherein ~~producing signals which represent~~ determining the cost, comprises determining service level agreement penalties associated with breaches of service level agreement clauses.
5. (Currently amended) The method of claim 1 further comprising ~~producing signals indicating~~ determining performance degradation information and service violation information associated with a root cause of one of said plurality of system problems.
6. (Original) The method of claim 5 further comprising receiving from an alarm correlator an indication of an alarm associated with a root cause of a problem.
7. (Currently amended) The method claimed in claim 1 wherein ~~producing signals concurrently annunciating~~ comprises ~~producing signals~~ concurrently annunciating for use by a display device for producing a display image.

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8. (Original) The method of claim 7 further comprising enabling user selection of at least one of performance degradation information, alarm information and service violation information, for concurrent display with an associated system problem.

9. (Currently amended) The method of claim 1 wherein producing problem priority information comprises ~~producing signals depicting~~ determining at least one of performance degradation information and service violation information.

10. (Currently amended) The method of claim 9 wherein ~~producing signals for depicting~~ determining performance degradation information comprises receiving signals representing system fault events.

11. (Previously presented) The method of claim 1 wherein producing problem priority information comprises quantifying at least one of performance degradation information and service violation information to produce said problem priority information associated with said system problems.

12. (Original) The method of claim 11 further comprising receiving a plurality of alarm data units.

13. (Original) The method of claim 11 further comprising receiving a plurality of performance degradation data units for providing said performance degradation information.

14. (Original) The method of claim 11 further comprising receiving a plurality of service violation data units for providing service violation information.

15. (Previously presented) The method of claim 11 further comprising receiving alarm data units for providing alarm information, receiving performance degradation data units for providing performance degradation information and receiving service violation data units for providing service violation information.

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16. (Original) The method of claim 15 further comprising associating at least one of said performance degradation information and said service violation information with one of said system problems.
17. (Original) The method of claim 16 further comprising producing signals representing a count of at least one of said alarm data units, said performance degradation data units and said service violation data units related to said one of said system problems.
18. (Currently amended) The method of claim 1 wherein ~~producing signals~~ concurrently annunciating comprises ~~producing signals for displaying~~ concurrently annunciating to display a system problem hierarchy including at least one system problem, and at least one of performance degradation information, alarm information and service violation information associated with a selected one of said problem objects.
19. (Currently amended) The method of claim 1 further comprising transmitting said concurrently annunciated system problems and problem priority information as signals to a display device for use in producing a visual display.
20. (Currently amended) The method of ~~claim 1~~ claim 19 further comprising producing a display image in response to said signals.
21. (Currently amended) A method of annunciating problems in a system comprising correlating performance degradation information and service violation information associated with system problems, to produce problem priority information for said system problems; and ~~concurrently displaying~~ visually annunciating said system problems and said problem priority information associated with said system problems.
22. (Previously presented) A computer readable medium encoded with instructions for directing a processor circuit to carry out the method of claim 1.
23. (Canceled)
24. (Currently amended) An apparatus for annunciating problems in a system, comprising

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a) means for receiving data representative of system conditions, said data including performance degradation information and service violation information associated with system problems;

b) means for correlating said performance degradation information and said service violation information to produce problem priority information for said system problems; and

c) means for ~~producing signals for~~ concurrently annunciating said system problems and said problem priority information associated with said system problems.

25. (Currently amended) An apparatus for annunciating problems in a system, comprising:

a) a receiver for receiving data representative of system conditions, said data including performance degradation information and service violation information associated with system problems;

b) a signal generator including a processor in communication with said receiver for correlating said performance degradation information and said service violation information, to produce problem priority information for said system problems and ~~for producing signals for~~ to concurrently indicating ~~annunciate~~ said system problems and said problem priority information associated with said system problems.

26. (Previously presented) The apparatus of claim 25 wherein said processor circuit is configured to quantify a relative importance of said system problems.

27. (Original) The apparatus of claim 26 wherein said processor circuit is configured to associate a cost with at least one system problem.

28. (Previously presented) The apparatus of claim 27 wherein said processor circuit is configured to produce signals representing service level agreement penalties which are associated with breaches of service level agreement clauses.

29. (Currently amended) The apparatus of claim 25 wherein said signal processor circuit is configured to ~~produce signals indicating~~ concurrently annunciate said performance

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degradation information and said service violation information as being associated with a root cause of one of said plurality of system problems.

30. (Previously presented) The apparatus of claim 29 wherein said receiver is configured to receive from an alarm correlator an indication of an alarm associated with a root cause of a problem.

31. (Original) The apparatus claimed in claim 25 wherein said signal generator is operable to produce signals for use by a display device for producing a display image.

32. (Original) The apparatus of claim 31 wherein said signal generator is operable to produce signals for concurrently displaying with an associated system problem at least one of performance degradation information, alarm information and service violation information.

33 (Original) The apparatus of claim 32 wherein said signal generator is operable to produce said signals for concurrently displaying said at least one of performance degradation information, alarm information and service violation information in response to user input.

34. (Original) The apparatus of claim 25 wherein said signal generator is configured to produce signals for depicting at least one of performance degradation information and service violation information.

35. (Previously presented) The apparatus of claim 34 wherein said receiver is configured to receive data representing system fault events.

36. (Previously presented) The apparatus of claim 25 wherein said processor is configured to quantify at least one of performance degradation information and service violation information to identify said problem priority information associated with said system problems.

37. (Original) The apparatus of claim 36 wherein said receiver is configured to receive a plurality of alarm data units.

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38. (Previously presented) The apparatus of claim 36 wherein said receiver is configured to receive a plurality of performance degradation data units for providing said performance degradation information.
39. (Previously presented) The apparatus of claim 36 wherein said receiver is configured to receive a plurality of service violation data units for providing service violation information.
40. (Previously presented) The apparatus of claim 36 wherein said receiver is configured to receive alarm data units for providing alarm information, receive performance degradation data units for providing performance degradation information and receive service violation data units for providing service violation information.
41. (Original) The apparatus of claim 40 wherein said signal generator is configured to correlate at least one of said alarm information, performance degradation information, service violation information with one of said system problems.
42. (Original) The apparatus of claim 41 wherein said signal generator is configured to produce a count of at least one of said alarm data units, said performance degradation data units and said service violation data units related to said one of said system problems.
43. (Previously presented) The apparatus of claim 25 wherein said signal generator is configured to cause said signals to indicate a system problem hierarchy including at least one system problem, and a representation of at least one of performance degradation information, alarm information and service violation information associated with one of said system problems, selected by a user.
44. (Original) The apparatus of claim 25 further comprising a transmitter for transmitting said signals to a display device.
45. (Currently amended) A display apparatus for annunciating problems in a system, the apparatus comprising:

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a) a receiver for receiving data representative of system conditions, said data including performance degradation information and service violation information associated with system problems;

b) a signal generator including a processor circuit in communication with said receiver ~~for correlating to correlate~~ said performance degradation information and said service violation information, to produce problem priority information for said system problems; and ~~for producing signals for to~~ concurrently ~~indicating~~ ~~annunciate~~ said system problems and said problem priority information associated with said system problems; and

c) a display device for producing a visual image ~~in response to said signals~~ displaying said concurrently annunciated system problems and problem priority information.

46. (Currently amended) A method of annunciating problems in a system, comprising correlating performance degradation information and service violation information associated with system problems, to produce problem priority information ~~for correlated to~~ said system problems; and ~~producing signals for concurrently displaying~~ ~~annunciating~~ said system problems and said problem priority information associated with said system problems visually.

47. (Currently amended) A method of annunciating problems in a system, comprising correlating performance degradation information and service violation information associated with system problems, to produce problem priority information ~~for correlated to~~ said system problems; and ~~producing signals for concurrently displaying~~ visually annunciating said system problems and said problem priority information associated with said system problems, and producing signals which represent a cost associated with at least one problem.

48 (Currently amended) An apparatus for annunciating problems in a system, comprising:

a) a receiver for receiving current data representative of system conditions, said current data including current performance degradation information and service violation information associated with system problems; and

b) a signal generator including a processor circuit in communication with said receiver ~~for correlating to correlate~~ said performance degradation information and said service violation information, to produce problem priority information ~~for correlated to~~ said system

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problems; and ~~for producing signals for~~ to concurrently ~~indicating~~ annunciate said system problems and said problem priority information ~~associated~~ correlated with said system problems.

49. (Currently amended) An apparatus for annunciating problems in a system, comprising:

a) a receiver for receiving current data representative of system conditions, said current data including performance degradation information and service violation information associated with system problems; and

b) a signal generator including a processor circuit in communication with said receiver ~~for correlating~~ to correlate said performance degradation information and said service violation information, to produce problem priority information ~~for~~ correlated to said system problems; and ~~for producing signals for~~ to concurrently ~~indicating~~ annunciate said system problems and said problem priority information ~~associated with~~ correlated to said system problems, and wherein said signal generator comprises means for associating a cost with at least one system problem.